AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method in a computer system for predicting a level of consumption of healthcare resources by modeling utilization of healthcare resources in a target period ~~based on a plurality of provider claims from a base period maintained for a member of a healthcare plan~~, the method comprising:

compiling a plurality of provider claims for each of a plurality of members of a health plan, wherein the provider claims for the plurality of members occur within a base period and include a plurality of health conditions;

calculating a burden of illness score for ~~the~~ each member based on the member's plurality of provider claims, wherein the burden of illness score is a number calculated by identifying a number of selected disease or drug categories present in the plurality of provider claims for the member and calculating a weighted sum of the identified number of selected disease or drug categories; ~~and~~

computing a utilization score for each health plan ~~the~~ member based on the burden of illness score and at least one explanatory variable, wherein the explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member ~~wherein a plurality of utilization scores is computed that correspond to each of a plurality of members in a health plan~~; and

using the utilization score to predict healthcare resource consumption in the target period by at least one plan member.

2. (Original) The method of claim 1 wherein the provider claims include medical claims and pharmacy claims.

3. (Original) The method of claim 1 wherein the plurality of provider claims include only pharmacy claims.

4. (Currently Amended) The method of claim 1 wherein the provider claims include only medical claims, and the disease categories are CCG categories.

5. (Previously Presented) The method of claim 1 further including, prior to the calculating step, extracting a data set from the plurality of provider claims, the data set including only information from the base period relevant to healthcare utilization during the target period, and further wherein the calculating step is based on the data set.

6. (Previously Presented) The method of claim 5 further including, after the extracting step, the step of cleaning the data set to remove obviously erroneous information by comparing categories of the data set to acceptable values.

7. (Currently Amended) The method of claim ~~5~~ 1, wherein ~~further including, after the extracting step, the step of placing~~ a plurality of pharmacy codes in the plurality of provider claims~~, representing a prescribed medication,~~ are assigned to ~~into~~ a plurality of therapeutic pharmacy classes.

8. (Original) The method of claim 7 wherein the plurality of therapeutic pharmacy classes are GC3 classes.

9. (Previously Presented) The method of claim 7 wherein the burden of illness score is derived by summing a plurality of weights corresponding to each of the plurality of therapeutic pharmacy classes present for the member.

10. (Previously Presented) The method of claim 7 wherein the burden of illness score is derived by summing a plurality of weights corresponding to each of the plurality of therapeutic pharmacy classes present for the member and a plurality of weights corresponding to relevant combinations of therapeutic pharmacy classes present for the member.

11. (Currently Amended) The method of claim ~~5~~ 1, wherein ~~further including, after the extracting step, the step of placing~~ a plurality of disease codes from the plurality of provider ~~medical~~ claims~~, representing diseases treated,~~ are assigned to ~~into~~ a plurality of disease classes.

12. (Original) The method of claim 11 wherein the disease classes are CCG classes.

13. (Original) The method of claim 11 wherein the disease classes are CCG categories.

14. (Previously Presented) The method of claim 11 wherein the burden of illness score is derived by summing a plurality of weights corresponding to each of the plurality of disease classes present for the member.

15. (Previously Presented) The method of claim 14 wherein the plurality of weights is an average incremental cost associated with each of the plurality of disease classes associated with a group for a benchmark population.

16. (Currently Amended) The method of claim 1 further including, prior to the calculating step, ~~the steps of~~ determining the presence of a plurality of medical episodes in the plurality of provider claims and grouping ~~placing~~ the plurality of provider claims ~~data~~ into ~~a plurality of~~ one or more groups based on a medical episode.

17. (Currently Amended) The method of claim 16 wherein the ~~plurality of~~ groups are Clinical Care Groups.

18. (Currently Amended) The method of claim 16 wherein ~~the~~ pharmacy claims in the plurality of provider claims ~~data~~ are assigned to one or more of the ~~plurality of~~ groups based on a relationship to corresponding medical claims indicating the presence of the medical episode.

19. (Currently Amended) The method of claim 16 wherein the plurality of provider claims are only medical claims.

20. (Canceled) ~~The method of claim 16 wherein the calculating step includes multiplying each of the plurality of groups representing a medical episode, present for the member, by a predetermined weight factor and summing the products to achieve a single number.~~

21. (Currently Amended) The method of claim 1 ~~20~~ wherein the burden of illness score ~~predetermined weight factor corresponding to one of the groups, representing a medical episode,~~ is adjusted ~~based on~~ to reflect the presence of a comorbidity ~~for the group, in the data~~ in the member's plurality of provider claims.

22. (Currently Amended) The method of claim 1 ~~20~~ wherein the burden of illness score ~~predetermined weight factor corresponding to one of the groups, representing a medical episode,~~ is adjusted ~~based on~~ to reflect the presence of a complication ~~for the group~~ in the member's plurality of provider ~~medical~~ claims.

23. (Currently Amended) The method of claim 1 ~~20~~ wherein the burden of illness score ~~predetermined weight factor corresponding to one of the groups, representing a medical episode,~~ is adjusted ~~based on~~ to reflect the age of the member.

24. (Currently Amended) The method of claim 1 ~~20~~ wherein the burden of illness score ~~predetermined weight factor corresponding to one of the groups, representing a medical episode,~~ is adjusted ~~based on~~ to reflect the gender of the member.

25. (Currently Amended) The method of claim 1 ~~20~~ wherein the burden of illness score ~~predetermined weight factor corresponding to one of the groups, representing a medical episode,~~ is calculated based on an average incremental cost associated with a group for a benchmark population.

26. (Currently Amended) The method of claim 1 ~~20~~ wherein the burden of illness score ~~predetermined weight factor corresponding to one of the groups, representing a medical episode,~~ is calculated based on an average incremental cost for a group during the base period.

27. (Original) The method of claim 1 wherein the at least one explanatory variable is a number indicating in which of a plurality of age categories the member belongs.

28. (Original) The method of claim 1 wherein the at least one explanatory variable is a number indicating the gender of the member.

29. (Original) The method of claim 1 wherein the explanatory variable is a factor that indicates a number of chronic claims for the member.

30. (Original) The method of claim 1 wherein the explanatory variable is a factor that indicates a number of chronic drug categories, based on the plurality of claims data, for the member.

31. (Original) The method of claim 1 wherein the explanatory variable is a factor that indicates the recency of claims for the member.

32. (Original) The method of claim 1 wherein the explanatory variable is the sum of chronic medical costs from the pharmacy claims and the medical claims.

33. (Previously Presented) The method of claim 1 further including, after the computing step, the step of calculating a relative risk for the member of a group by dividing the utilization score by an average utilization score for the group.

34. (Previously Presented) The method of claim 1 further including, after the computing step, the step of calculating a relative risk for the member of a group by dividing the utilization score by an average utilization score for a benchmark group.

36. (Previously Presented) The method of claim 1 wherein the plurality of utilization scores is computed based on only the information from the pharmacy claims.

37. (Previously Presented) The method of claim 36 further comprising the step of identifying a high risk set of members by selecting the members having utilization scores that exceed a predetermined level.

38. (Previously Presented) The method of claim 37 further comprising the step of computing a second plurality of utilization scores for the high risk set of members based on the information in both the pharmacy claims and the medical claims.

39. (Previously Presented) The method of claim 1 further comprising, prior to the computing step, calibrating the model by comparing a computed utilization score against healthcare resource utilization for a known target period.

40. (Original) The method of claim 39 wherein the healthcare resource utilization is derived from both medical claims and pharmacy claims.

41. (Original) The method of claim 39 wherein the healthcare resource utilization is derived from only medical claims.

42. (Original) The method of claim 39 wherein the healthcare resource utilization is derived from only pharmacy claims.

43. (Previously Presented) The method of claim 1 further comprising, prior to the computing step, calibrating the model by comparing a computed utilization score against healthcare resource utilization for a known target period, for only utilization due to chronic medical conditions.

44. (Original) The method of claim 43 wherein the healthcare resource utilization is derived from both medical claims and pharmacy claims.

45. (Original) The method of claim 43 wherein the healthcare resource utilization is derived from only medical claims.

46. (Original) The method of claim 43 wherein the healthcare resource utilization is derived from only pharmacy claims.

47. (Previously Presented) The method of claim 1 further comprising, prior to the computing step, the step of calibrating the model by comparing the calculated burden of illness score against healthcare resource utilization for a known target period.

48. (Currently Amended) A method in a computer system for predicting use of healthcare resources by a plurality of plan members in a healthcare plan, comprising:

compiling claim data for each of a plurality members of a health plan, wherein the claim data for the plurality of members occurs within a base period and includes a plurality of disease categories;

calculating a burden of illness score for each member based on the member's claim data, wherein the burden of illness score is a number calculated by identifying a number of selected disease categories present in the member's claim data and calculating a weighted sum of the identified number of selected disease categories;

computing a utilization score for each health plan member based on the burden of illness score and at least one explanatory variable, wherein the at least one explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member, and wherein the utilization score is a weighted sum of the at least one explanatory variable and the burden of illness score; and

~~for each of the plurality of plan members in the~~ a ~~healthcare plan:~~

~~collecting prior healthcare use claims data for the plan member;~~

~~computing a utilization score using, at least in part, a multiple linear regression equation, wherein the act of computing comprises computing a burden of illness score; and~~

using the utilization score to predict healthcare resource consumption by at least one ~~the~~ plan member.

49. (Currently Amended) A method in a computer system for determining consumption of healthcare resources by a plurality of plan members in a healthcare plan during a base time period, comprising:

compiling claim data for each of a plurality members of a health plan, wherein the provider claims for the plurality of members include a plurality of drug categories;

calculating a burden of illness score for each member based on the member's claim data, wherein the burden of illness score is a number calculated by identifying a number of selected drug categories present in the member's claim data and calculating a weighted sum of the identified number of selected drug categories;

computing a utilization score for each health plan member based on the burden of illness score and at least one explanatory variable, wherein the at least one explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member, and wherein the utilization score is a weighted sum of the at least one explanatory variable and the burden of illness score; and

using the utilization score to predict healthcare resource consumption by at least one plan member

~~for each of the plurality of plan members in the healthcare plan:~~

~~collecting prior healthcare use claims data for a plan member;~~

~~calculating a burden of illness score for the member based on prior healthcare use claims; and~~

~~computing a utilization score for the member based on the burden of illness score and at least one explanatory variable; and~~

~~using the computed utilization scores to identify plan members to whom preventive measures are recommended in an effort to reduce consumption of healthcare resources~~.

50. (Currently Amended) A method in a computer system for predicting a level of consumption of healthcare resources by modeling utilization of healthcare resources in a target period of time, comprising:

compiling claim data for ~~each member~~ a plurality of members in a health plan having a plurality of health conditions within a base period of time;

determining the presence of a plurality of medical episodes in the claim data and grouping the claim data into one or more groups based on a medical episode;

calculating a burden of illness score for each member in the health plan by identifying predefined data items within the grouped claim data, the predefined data items corresponding to a plurality of health conditions and having an associated burden weight, wherein the burden of illness score for each member in the health plan is calculated by summing the predefined data items identified for each member as weighted using the associated burden weight; ~~and~~

computing a utilization score for each member in the health plan for the target period based upon the burden of illness score for each member and at least one explanatory variable, wherein the explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member; and

using the utilization score to predict healthcare resource consumption by at least one plan member.

51. (Previously Presented) The method of claim 50, wherein each of the plurality of health conditions corresponds to a diagnosis classification, treatment classification or pharmaceutical classification.

52. (Previously Presented) The method of claim 50, wherein the target period is later in time than the base period.

53. (Previously Presented) The method of claim 50, wherein the target period is the same time period as the base period.

54. (Previously Presented) The method of claim 50 wherein the claim data includes medical claims and pharmacy claims.

55. (Previously Presented) The method of claim 50 wherein the claim data includes only pharmacy claims.

56. (Previously Presented) The method of claim 50 wherein the claim data includes only medical claims.

57. (Previously Presented) The method of claim 50 further including the step of cleaning the claim data to remove obviously erroneous information by comparing categories of the data set to acceptable values.

58. (Previously Presented) The method of claim 51, wherein the health conditions correspond to GC3 pharmacy classes.

59. (Previously Presented) The method of claim 51 wherein the health conditions correspond to CCG classes.

60. (Previously Presented) The method of claim 51, wherein the health conditions correspond to categories defined by a grouping of diagnosis or treatment codes.

61. (Previously Presented) The method of claim 50 wherein each associated burden weight is an average incremental cost associated with a health condition for a benchmark population.

62. (Canceled) ~~The method of claim 50 further including the steps of determining the presence of a plurality of medical episodes and placing the claim data into a plurality of groups based on a medical episode.~~

63. (Previously Presented) The method of claim 50 wherein pharmacy claims in the claim data are assigned to one of a plurality of groups based on a relationship to corresponding medical claims indicating the presence of the medical episode.

64. (Previously Presented) The method of claim 50 wherein the associated burden weight for at least one health condition is adjusted based on the presence of a comorbidity in the claim data.

65. (Previously Presented) The method of claim 50 wherein the associated burden weight for at least one health condition is adjusted based on the presence of a complication in the claim data.

66. (Previously Presented) The method of claim 50 wherein the associated burden weight for at least one health condition is adjusted based on the age of each member.

67. (Previously Presented) The method of claim 50 wherein the associated burden weight for at least one health condition is adjusted based on the gender of the member.

68. (Previously Presented) The method of claim 50 wherein the associated burden weight for at least one health condition is adjusted based on an average incremental cost associated with a benchmark population.